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OBSERVATIONS
ON
THE USE OF OPIUM
IN DISEASES
SUPPOSED TO BE OWING TO
MORBID IRRITABILITY.

BY
ALEXANDER GRANT,
SENIOR SURGEON OF HIS MAJESTY'S
MILITARY HOSPITALS
DURING THE LATE WAR IN NORTH AMERICA.

LONDON,
PRINTED BY J. NICHOLS, FOR THE AUTHOR.

MDCCCLXXXV.

THE USE OF OPTICS

AND THE THEORY OF VISION

BY J. H. P. L. VAN DER LINDEN

AMSTERDAM: P. VAN NOORDEN, 1871

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TO

ROBERT ADAIR, ESQ.

INSPECTOR GENERAL

OF ALL HIS MAJESTY'S MILITARY HOSPITALS,

&c. &c. &c.

SIR,

IMMEDIATELY upon my return to this country, I should have communicated the following Observations on the Use of Opium ; but one opportunity soon offering of exhibiting it in a similar case to those in which I had found it successful; and since

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that three or four others, the last of which was a very bad ulcerated Throat; I thought it was better to wait the event of these cases, than too hastily to adopt an opinion, which, from its novelty and importance, demanded the most guarded circumspection.

As the experienced salutary Effects of Opium in a Disease, in which its Effects have hitherto been little known, arose in most instances from circumstances in the constitution, owing to irregularities incident to a Military Life, I have endeavoured, as far as my experience would lead me, precisely to determine what these circumstances are.

And

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And as it is to you, Sir, I am indebted for the situation which afforded me these Observations, I think it my duty to address them to you; and I am extremely happy in this opportunity of expressing *my Gratitude*, and of assuring you, that I am always, with esteem and truth, Sir,

Your most obedient,

And most obliged humble Servant,

St. Alban's Street,
Jan. 21, 1785.

ALEXANDER GRANT.

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IN the year 1779 I had an opportunity of observing, in his Majesty's General Hospital at New York, the good Effects of OPIUM, in a variety of cases where Mercurial preparations appeared to be of no efficacy.

It happened that a great number of soldiers fell under my care at the same time, who laboured under evident symptoms of Morbid Irritability, which might be owing to different causes; but all these Patients *were undergoing, or had undergone,* a course of mercury.

And here I may remark, that soldiers in general are cured of the Venereal Disease with more difficulty than any other Patients,

4 owing

owing to their ignorance and inattention, or to their desire of protracting the disease, and frustrating the usual modes of relief.

These symptoms, in all their variety of appearances and changes, at first arising from the venereal virus, and terminating in what has since, upon reasoning and reflexion, appeared to me to be brought on by Morbid Irritability, were all relieved, and finally the cure compleated, by alleviating pain, and procuring rest.

The state of the disease in which (as far as I am able to judge from the trials I have made) our expectations are likely to be answered from the use of Opium, is when the ulcers are spreading, or continue much the same, with a foul appearance, bad discharge, and much pain, the patient having little or no rest, and all local applications seeming to be of no service: to these symptoms

toms may be added a quick pulse, which is an invariable attendant, being, in general above an hundred, sometimes an hundred and twenty, and sometimes more, in a minute.

When I first administered Opium in cases of this sort, I had the satisfaction to find, that I gained two material points, viz. Ease and Rest; with some in the first twenty-four hours, and in general within the two first days; afterwards, from these good consequences, I was induced to continue the use of it, increasing or diminishing the quantity as occasion required, entirely omitting at the same time the use of mercurial applications, either externally or internally.

Without entering into a disquisition on Opium, I take the liberty of concluding, it will be sufficient if I am enabled to state

facts, and mention the useful effects of this medicine in a disease, one of the most violent that the human body can be afflicted with.

With regard to the action of Opium on the body in this disease, I have to observe, that in some patients its effects were sudden, in others gradual; in general the circulation of the blood was very much decreased, and sometimes the pulse was rendered so slow as to beat only fifty and forty times in a minute; but this effect is not always necessary to the cure, as a good deal will depend upon the patients disposition to Irritability, which is the principal thing I attend to—for I have constantly observed, that as soon as that has been lessened, some salutary change has been produced on the surface of the ulcer.

Its effects, in a few of the cases, were almost instantaneous; amongst them was that of a young man, twenty-two years of age, who had a Bubo in each Groin, which were opened and treated in the usual way, but continued in an ulcerated state for five months, during which time he rubbed in three ounces and a half of strong mercurial ointment, which seemed sufficiently to affect the constitution; a proper diet was used, and every thing else directed which was thought necessary at the time. Perceiving no change, he was ordered to wash out, and take purging physick; which he did several times—three weeks elapsed—at this period he was not in the least emaciated, but remained in full strength and good habit of body. At this time the ulcers were foul, with thick edges, and the discharge from them ichorous, with con-

siderable pain ; and the patient had little
 or no rest. I then began with Opium, and
 gave him the first night one grain and a
 half only, directed a low diet, and dressed
 the ulcers in the most simple manner ; the
 next day there was no alteration : I in-
 creased the dose of the medicine, half a
 grain in that day ; the following day he
 was much the same ; but the day after-
 wards, which was the fourth, a favourable
 change was observed ; and, from that time
 to the expiration of three weeks, gradual
 changes took place, and both ulcers per-
 fectly healed, without his having had oc-
 casion to increase the dose, or to make use
 of any other medicine. And here I will
 beg leave to remark, that with every pa-
 tient I have avoided as much as possible
 such applications as seemed to make the
 parts in any way uneasy. A soft well-
 made

made bread and milk poultice will answer in the early part of the treatment, and afterwards dry lint and cerate; but, if a fungus exists, I prefer a solution of thebaic extract in an oatmeal poultice, applied cold in contact with the sore, to any thing else.

The manner in which the alteration takes place is both curious and singular; the first favourable symptoms are ease and rest; the next, if I may be allowed the expression, is an unfolding or loosening of the texture of the surface of the ulcer after the irritability is lessened, which effect soon takes place, the parts are in a state of relaxation, owing to the stricture on the surface being relieved, and finally the cure is assisted by the skin corrugating, or contracting to the center of the ulcer, unaided by stimulating applications, and,

frequently, with very little assistance, by the usual way of a new skin.

In several cases I have observed the cure go on extremely well, without the surface of the ulcer, appearing florid at any one time, as is usual in healthy-looking sores. I am very happy in this part, in having Mr. Wier's, Surgeon of his Majesty's Military Hospitals, permission to say, that he has observed all the above facts that I mention. And since that, having communicated my ideas to Mr. Forster, who is likewise Surgeon of his Majesty's Military Hospitals, and whose abilities I respect, I have much satisfaction in being able to add his opinion in corroborating the above facts; Mr. Forster having observed the same appearances, and changes, that I have endeavoured to describe.

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The third, fourth, or fifth day was the time I in general found the appearance of the sores change for the better.

The dose that I have in general begun with in this disease, has been about one grain and a half the first night, which I have increased night and morning, until I found it answered the intended purposes. With a view of keeping the patient quiet, and less disposed to move, I always divided the time, and therefore gave it night and morning; and what is very extraordinary, the patient in the day-time never appeared to me more drowsy than if he were not making use of the medicine; but with some an indolency took place, and continued, or discontinued, either as the constitution became used to the medicine, or to the variation of the dose. I confess myself, I was always happy when
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it appeared; as I never knew any harm accrue from it: and, besides its own action internally, Opium disposes a restless temper of mind, to observe a proper regimen, and to obey any directions that may be thought necessary at the time. I have always observed, that it is best to keep the patient ignorant of the medicine whilst he is using it.

A tremor, which sometimes came on, never obliged me to decrease the dose, or to pay any particular attention to this symptom, unless the bowels were disposed to be costive; and then a purge readily relieved it in a great measure.

The preparation that I invariably gave my patients was *Extractum Thebaicum*; if any objection arose to its being used in a solid state, I preferred dissolving the dose in

in plain water to the tincture, or any other form.

With regard to the quantity that may be given, I will not determine; I think for the most part the disease yielded to about four or six grains a day; I have in two or three cases given eight grains, and in one extraordinary case of a cancerous lip, of near three years standing, I increased the quantity to twenty-four grains in a day, divided in three doses; the patient was a man about fifty years of age, and I was six weeks in bringing him to this dose, which I continued for a few days, and finding that it did not do any material service in the progress of the cure, I discontinued it; yet now and then a favourable change seemed to appear, for two sinuses that I had occasion to lay open di-

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gested

gested well, and closed; no ill effects were produced by the medicine, excepting sometimes a giddiness, which was always relieved by a gentle purge; previous to his making use of Opium, he had always a quick pulse; but it afterwards decreased to between forty and fifty strokes in a minute, and continued so for some time. And I cannot help being very much of opinion, that had Opium been properly given in the earlier state of the disease, a cure might have been obtained; and in this opinion I am confirmed by a case I have lately attended; which was an ulcer in the mouth of three months standing, with all the characteristic marks and symptoms of an Incipient Cancer, which was compleatly cured by Opium and Cicuta joined. This patient (Major Sinclair) Dr. Garthshore attended

attended with me; the first time we saw him we agreed in opinion with respect to the means to be pursued for his cure, and never had occasion to deviate from the plan. Before he began the use of these medicines, he was almost in a state of distraction from pain, and his pulse beat an hundred and twenty strokes in a minute. This quickness of pulse was diminished on the third day, and about the tenth the ulcers changed for the better; and in a month afterwards he was quite well*.

Gentle Purges frequently become necessary in the early part of using the medicine, though in a small dose, especially where the body is disposed to be

* This Patient drank a decoction of four ounces of Sarsaparilla every twenty-four hours during his cure.

costive; and I have generally found that a little glauber salts answered the purpose, as this operated without my being obliged to delay the use of Opium; on the second or third day with some a head-ach came on in consequence of the bowels being constipated; but this always readily gave way to a gentle purge, and I have always found, that as the constitution became used to the medicine the pain of the head was no longer an attendant, and in general the body became regular; nay, with some a Diarrhœa has been produced, which has continued for two or three days, and that without seeming to do any harm.

An increased secretion of saliva is not uncommon, as well as of urine; it does not depend upon taking a large quantity, for it will happen sometimes in the first

fix days; but neither one, nor the other, seems at any time to be injurious, nor does it appear necessary to forward the cure, as patients who have experienced neither of those effects have obtained it in as short a space of time.

One remark further I must add, with regard to diet, viz. that until I procured ease and rest, I continued the patient on a low diet, which I in general began with; and as circumstances changed afterwards, so I made such alterations as the constitution seemed to require; sometimes adding meat, and sometimes either a gill of rum in the day, or wine in proportion.

From the above observations it will appear, that I am inclined to confine the good effects of Opium (which are indeed very considerable) to an advanced stage of
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the disease, or what, in my humble opinion, may more properly be termed *Morbid Irritability* simply, in which state, mercury has either lost its efficacy, or seems to do mischief; and this irritability may, I apprehend, probably arise from different causes, as it certainly may be a question, whether there was any Virus of a Venereal Nature, remaining in the cases in which I gave Opium: however that may be, the good effects of the medicine were unquestionable; and it will appear that I do not trust to Opium as a specific in recent cases, or where any part of the Venereal Virus might seem to remain; for the last case I had under my care being of so complicated a nature, I joined Mercury with the Opium for the last three weeks, but not till I had fully and effectually
relieved

relieved the symptoms of Morbid Irritability.

The case I allude to was, that of a bad fore throat, which came under my care about six months ago: the patient was a gentleman about three or four and thirty years of age, and of a thin habit.—At the time I first saw him he was rather in an emaciated state: he was pursuing a course of mercury, which he had begun about two months before. I found upon examination several ulcers in the Fauces, and a large one on the left tonsil; a severe pain on the forepart of one leg, with the Periosteum thickened—an eruption on his breast, his pulse beating an hundred and thirty strokes in a minute; a most restless disposition—great anxiety—and he had not had any sleep for some weeks:

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I omitted entirely the whole of the plan he was then upon, and did not give him any thing till bed-time, when he took one grain and a half of Opium, with directions to repeat one grain the morning following. Upon seeing him the next day, before I asked him a question, he cried out, "I am a well man to what I was; I have had no pain since last night, and slept well." This formed the foundation of his cure. I increased the dose, till he took three grains at night, and two in the morning.

On the second day he made use of the steam of hot water, through the inhaler, which he repeated occasionally afterwards with evident advantage.

On the third day the ulcers seemed to appear cleaner, and every day afterwards
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he gradually grew better, till the twenty-fourth day, when all the parts were healed.—On the fifth day I observed that his pulse was in a natural state, and it continued so the whole time of his recovery.

The eighth day after using the Opium a spitting came on, and continued eleven days. For a few days he spit about a pint each day. This did not weaken him in the least—from being confined to his bed, he was able to walk about, and every day gained strength. Just at this time I directed a quart of very strong decoction of Sarsaparilla to be taken every day, which produced a gentle diaphoresis; and I continued this plan for six weeks, and, for the sake of security, for the last three weeks I joined to the Opium at bed-time

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half a grain of Mercurius Calcinatus. In the course of the first fortnight the eruption disappeared, and the thickened Perioestum gave way to a blister.

On the 20th day, I began to decrease the quantity of Opium.

And from the 24th to the 42d day, when I left it off, considering him as perfectly cured, I only gave one grain in the twenty-four hours—He had occasion to make use of purging medicines at different times, owing to a costive habit of body; but these never interfered with the Opium.

As concisely as possible I will just mention, among other cases, the following:

William Rockett, of the detachment of Guards that was in America during the late war, thirty-seven years of age, had
ulcers

ulcers on each tonsil, and almost the whole of the fauces, with violent pains in his bones. These complaints were of three months standing; mercurials, and other medicines, had been administered during the whole of that time.

He was of a thin habit of body, with a pulse from an hundred and twenty to an hundred and thirty strokes in a minute. He began with one grain and a half of Opium the first night.

On the third day, no alteration having taken place, I increased the dose one grain.

The next day, to appearance the ulcers seemed not quite so angry; and in every other respect he was better.

On the eighth day, he appeared weak, and his throat in general relaxed. I

omitted the Opium, and began with the Peruvian Bark, in as large doses as the patient's stomach would bear, and ordered him to make use of an astringent gargle.

On the tenth day, the Bark occasioning nausea, I was obliged to leave it off. The pain in his bones returning with violence, I again gave him two grains in the morning.

The next day he was better.

On the twelfth day, as he was much the same, I increased the dose, one grain in the morning, and continued this plan to the fifty-second day, without varying the dose; when every thing seemed to go on so extremely well, and the pains of the bones having left him, I omitted the two grains in the morning.

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In a week afterwards all the ulcers were healed ; and he was gaining strength daily. I continued one grain at night for a fortnight longer, and discharged him from the hospital perfectly cured. It was near a fortnight before the pulse returned to its natural state ; and afterwards it was frequently under sixty.—This case happened among the first in the year 1779 ; and Mr. Rush, Surgeon to the Second Troop of Horse Grenadier Guards, and late Surgeon to the Brigade of Guards in North America, was witness to the whole of the treatment.

Thomas Wells, thirty-six years of age, of a strong plethorick habit of body, with rather a full pulse, had small ulcers on the tonsils and fauces, and an ophthalmia, for which he had been salivated without the least benefit. I directed for him a low diet,
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and began with giving him one grain of Opium night and morning.

The next day he was easier.

The second day much the same.

The third day a good deal better.

And on the sixth day, being much the same, I increased the dose one grain at night.

The next day he was going on well, and continued getting better till the fourteenth day, when his throat was quite well, and his eyes much relieved.

On the sixteenth I omitted the Opium in the morning.

And on the eighteenth, as he was nearly well, I omitted one grain at night.

On the twenty-third, the inflammation was gone; and in every other respect he was perfectly well.

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On the thirtieth day the Opium was entirely omitted; and he was discharged from the hospital.

April 7th, 1782, I was desired to see John Blewers, a sailor, twenty-eight years of age, of a plethorick habit of body, with ulcers on the glans penis, a phymosis, the præputium in a gangrenous state, and suffering most excruciating pain; his pulse beat an hundred and twenty-strokes in a minute, and appeared to be increasing in quickness. He had rubbed enough of the mercurial ointment to affect his mouth twice.

I began with two grains of Opium at night and one in the morning.

The next day, he said he had enjoyed a good night's rest, which he had been a stranger to for some time.

On the ninth he was much the same in appearance; and I directed two grains of Opium to be taken night and morning.

On the tenth he had ease and rest.

On the eleventh the pain was much relieved; and there was an appearance of part of the præputium sloughing.

On the twelfth he was not quite so well; and the dose of Opium was now increased to three grains night and morning.

Thirteenth, he was better.

Fourteenth, the slough was thrown off; and he was better in every respect.

Fifteenth, he was in a good state, and continued going on well till the eighteenth of May, when the ulcers being nearly healed, I decreased the dose of Opium to four grains a day.

Twen-

Twentieth and twenty-first, I decreased the dose two grains more.

Twenty-fifth, he was quite well, but continued to take a single grain a day for a week longer.

Besides the above, I had the satisfaction of effectually relieving, with the same manner of treatment, ten other patients; of whom, six had either obstinate or spreading ulcers in the groin; one an ulcerated glans penis; and three ulcerations of the tonsils and fauces.

HAVING remarked, that in cases where fungus exists I prefer a solution of thebaic extract in an oatmeal-poultice, made and applied cold, I beg leave, as proofs of its peculiar efficacy, to add the two following

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cases ; neither of which, as far as my enquiries went, originated from the Venereal Disease.

1.

Isaac Pratt, twenty years of age, had a very large ulcer on the fore part of his right leg, with a fungus at least an inch high on one part, inclining to the inside of the leg, and of a hard texture.—This ulcer, which came on after a long intermittent fever, began with an inflammation, attended with small white blisters. It grew worse and worse, and when I first saw him was of thirteen months standing. The Peruvian Bark, and other medicines, were occasionally made use of, as seemed necessary, as were also a variety of external applications (including a tight bandage),

without producing any favourable change, though the patient recovered his health in every other respect. The discharge from the ulcer was ichorous, and at times the pain was very great; but at intervals he was perfectly easy; his pulse was never affected, excepting when he was in pain.—Conjecturing that Morbid Irritability might be the cause of the ulcers continuing in the same bad state, I left off the usual dressings, and in their stead applied to the sore an oatmeal-poultice, prepared with a solution of thebaic extract, in the proportion of three drachms of the latter to eight ounces of cold water. This dressing I renewed twice a day; and I likewise began with giving him internally one grain of Opium night and morning.—This was on the 25th of February, 1780.

On the 28th no alteration was produced. I increased the dose to two grains night and morning.

March 3d, no alteration being observable, I increased the dose of Opium to three grains night and morning: at this time I found it necessary to give him a purge.

On the 5th, there seemed to be an appearance of a favourable change.

During the five following days the changes for the better, though slow, were very evident; and, upon applying my finger to the fungus, I felt that it was not quite so hard as before. At this time another purge was thought necessary, and the patient continued till the latter end of April, gradually getting better.

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The same dose of Opium, viz. three grains, was constantly exhibited; and now and then, as occasion required, a small dose of salts, which always answered the purpose of procuring stools when well diluted.

On the 3d of May the fungus was totally gone, and the ulcer nearly healed.

On the 5th, I decreased the dose of Opium to two grains in the day.

On the 7th, I decreased it to one grain.

And on the 8th I entirely left it off.

On the 20th, the ulcer was perfectly cicatrized. I had continued the poultice till within six days of the cure, and then applied cerate.

About eight months afterwards, I saw this man, and he informed me, that his leg had continued well from the time he was discharged from the hospital.

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This ulcer healed without having had at any one time a florid appearance.

This case, with others that I have had an opportunity of observing, together with the remarks of my colleagues Messrs. Forster and Wier, will, I flatter myself, be sufficient to make Surgeons less fearful of the probability of a cure being obtained, and less desirous of using stimulating applications, with a view of producing the change to a florid, or what is commonly termed healthy state of an ulcer; for, as far as I am able to judge, by so doing the cure will be protracted.

II.

March 16th, 1780, Abraham Elstone, forty-one years of age, was received into the General Hospital, with an ulceration on the

the whole surface of the chin and left side of the lower jaw, with a fungus of nearly the thickness of half an inch, irritable to the touch, and extending universally over the ulcer, and attended with an ichorous discharge. He had been six weeks in this state.—He informed me, that at two or three different times, in the early part of his life, he had been subject to an enlargement of the maxillary glands, which had always been soon relieved.—The Surgeon, whose care he was under for the present disease, considered the case as scrophulous, and treated it accordingly, without any sort of benefit, as the ulcer continued to spread, and was rendered exceedingly painful by the growth of the patient's beard.—I directed one grain of Opium to be administered night and morning, and likewise

likewise recommended the use of an opiate poultice cold, as in the former case : this method was persevered in till the twentieth, but without any alteration, although the dose of Opium was increased to four grains night and morning.

On the 25th, there seemed to be an appearance on the ulcer for the better.— I increased the dose of opium to five grains night and morning.

From the 25th of March to the 3d of April, the patient complained less of pain ; and from the 4th to the 18th of April, the fungus was gradually decreasing.

On the 23d, the discharge was changed for the better, and the fungus was nearly gone.

And on the 25th, there was not the least appearance of fungus remaining, and the

the parts were perfectly easy and relaxed.

About a fortnight afterwards the ulceration was quite healed, and I laid aside the poultice ; but I did not begin to lessen the doses of opium till the 23d of May ; after which time I went on gradually diminishing them, till the patient omitted them altogether ; and on the 12th of June I discharged him from the hospital perfectly recovered ; and eighteen months afterwards I had an opportunity of enquiring after him, and had the pleasure to find he had continued well.



